

REMARKS

Claims 1-30 are pending. No amendments have been made by way of the present submission, thus, no new matter has been added.

In the outstanding Office Action the Examiner has required Applicants to elect one of the following groups since the groups are allegedly not linked as to form a single general inventive concept pursuant to PCT rule 13.1.

Group I claims 1-3, 14-16, 29-30, drawn to a modified glucose dehydrogenase wherein Met365 or Met365 and Asp167 in SEQ ID NO: 1 are replaced.

Group II claims 1, 4-5, 14-17, 29-30, drawn to a modified glucose dehydrogenase wherein Thr366 or Thr366 and Asp167 in SEQ ID NO. 1 are replaced.

Group III claims 1, 6-7, 14-16, 29-30, drawn to a modified glucose dehydrogenase wherein Tyr367 or Tyr367 and Asp167 in SEQ ID NO: 1 are replaced.

Group IV claims 1, 8-9, 14-16, 29-30, 29-30, drawn to a modified glucose dehydrogenase wherein Ile368 or Ile368 and Asp167 in SEQ ID NO: 1 are replaced.

Group V claims 1, 10-11, 14-16, 29-30, drawn to a modified glucose dehydrogenase wherein Cys369 or Cys369 and Asp167 in SEQ ID NO: 1 are replaced.

Group VI claims 1, 12-16, 29-30, drawn to a modified glucose dehydrogenase wherein Ala374 or Ala374 and Asp167 in SEQ ID NO: 1 are replaced.

Group VII claim 18, drawn to a modified glucose dehydrogenase comprising SEQ ID NO: 3.

Group VIII claim 19, drawn to a modified glucose dehydrogenase comprising SEQ ID NO: 4.

Group IX claim 20, drawn to a modified glucose dehydrogenase comprising SEQ ID NO:

5.

Group X claim 21, drawn to a modified glucose dehydrogenase comprising SEQ ID NO:

6.

Group XI claim 22, drawn to a modified glucose dehydrogenase comprising SEQ ID NO:

7.

Group XII claim 23, drawn to a modified glucose dehydrogenase comprising SEQ ID

NO: 8.

Group XIII claims 24-28, drawn to DNA, vector, transformant and methods of production of glucose dehydrogenase of claim 1.

Applicants respectfully traverse.

The Examiner has asserted that Groups I-XIII do not share the same technical feature since the proteins of Group I-XII, nucleotides, vector and host cell of Group XIII are unrelated and chemically distinct entities. Moreover, the Examiner asserts the technical feature linking Group I-XIII appears to be that they all relate to glucose dehydrogenase. Thus, the Examiner asserts that the glucose dehydrogenase does not constitute a special technical feature pursuant to PCT rule 13.2.

Applicants respectfully disagree with the Examiner. The Examiner has referred to the reference of Yoshida, (see page 4 of the Office Action). Applicants note that Yoshida discloses expression of recombinant PQQGDH's. However, the present invention does not merely relate to a glucose dehydrogenase, but rather relates to modified glucose dehydrogenase, which modified glucose dehydrogenase contains particular amino acid substitutions as required by the

various claims. These modified glucose dehydrogenases share the property of having lowered substrate inhibition (see page 3, lines 2-7 of the present specification). Thus, the modified glucose dehydrogenases of the present invention are linked so as to form a single general inventive concept. As such, the Examiner has required pursuant to PCT rule 13.1 to search and consider all claims, and at the very least the claims of Groups I-XII in their entirety.

In summary, the Examiner's Unity of Invention rejection is strongly traversed. However, in order to be fully responsive, Applicants hereby elect Group II, which is drawn to a modified glucose dehydrogenase wherein Thr366 or Thr366 and Asp167 in SEQ ID NO: 1 are replaced. This an election with traverse.

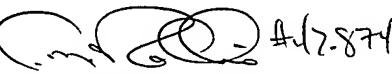
In view of the above, favorable action on the merits is respectfully solicited.

If the Examiner has any questions or comments, please contact Craig A. McRobbie, Registration No 42,874 at the offices of Birch, Stewart, Kolasch & Birch, LLP.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

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Respectfully submitted,

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